Emerging opportunities and challenges: Implications for the Nigerian maritime industry

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Maritime Report

MOVING into the Smart Ship Era What’s next? It’s a simple question to ask but it’s not so simple to answer. Companies are constantly scanning the horizon to see what’s coming and what the future holds.

The future poses many challenges but also open many new opportunities. World trade is expanding. Shipping as its workhorse is undergoing a transformation and facing huge challenges in maintaining competitiveness.

Global Trends Smart Ships: Smart ships are being widely debated as the shipping industry’s next technological revolution. In the manufacturing industry, the term ‘fourth industrial revolution’ describes how smart devices’ will replace the role of humans for the management, optimisation and control of machinery. Fully autonomy remains elusive for the vast majority of the industry.

A fully autonomous and unmanned vessel requires no input from humans other than in an emergency. As at today, the most advanced seagoing ships are at level one already considered “smart”, they are directed by humans but rely on systems and sensors for support in collecting data and making decisions.

Cyber Risk: As vessels become connected, increasingly smart and reliant systems, cyber safety and security have become a major concern for ship owners seeking to protect their data, people, assets and operations. However, cyber enabled ships and systems are already here as ships increasingly incorporate the systems and sensors required to suggest or even make autonomous decisions.

Big Data Analytics: IT infrastructure will be upgraded to retrieve, store and process data in real time. The shipping industry will, therefore, move from a decision-tree-driven approach to the adoption of a probabilistic approach.

Real-time performance monitoring, alert systems and/or visualizing situational awareness can all be achieved wherever you are and whenever you want.

This will help increase business competitiveness and will assist the shipping industry stakeholders to take proactive actions.

Sensors: Sensor technologies are developing rapidly to meet the ever-growing demand for data and information that will enable consumer-driven needs.

For example, The Internet of Things, which allows real-time monitoring and control of systems and processes, from home through to medical and industrial applications.

These will also address the need for ever-increasing capabilities to measure the ocean (and near ocean) environment, including biological, acoustic and electromagnetic characteristics. Robotics: In recent years, the technical potential of robotics has been demonstrated in various areas in commercial shipping. For the short- to mid-term future, autonomous robots will only see the application in a limited range of rather specific areas. In fields where, autonomous robotics is not a realistic option, at least for the foreseeable future, remote-controlled robots are a promising alternative.

Emerging Opportunities in the Nigerian Maritime Sector The concept of blue economy has taken a global focus and Nigeria, being hugely endowed in ocean resources can attain economic prosperity and wealth creation for its citizenry if the right investments are mobilized to optimize these resources and opportunities.

The Nigerian Maritime Industry is an enabler and facilitator of economic growth and prosperity. About 90% of world merchandise/trade by volume is carried by seas and over 60% of all imports to West Africa are Nigeria bound.

Over the years, maritime transportation has made the movement of cargoes of all types and volume both possible and efficient especially engendering economies of scale through massive cargo transportation that has positively impacted global logistics value chain.

The industry is constantly evolving leading to greater efficiencies and precipitating economic opportunities especially across coastal nations including Nigeria.

The unveiling of the 2018 Nigeria’s Maritime Industry Forecast in 2018 threw up Opportunities and Challenges in the Maritime and Shipping Sector leading to the drive for:

- Increased local participation in the Sector
- Capacity Building Development and Engagement of Seafarers on Board Cabotage Vessels
- Synergy among Regulators and Stakeholders
- Review of Fiscal and Trade Policies militating against full participation of Nigerians in activities in the Maritime and Shipping Sector
- Options to solve challenges of funding and investment capital for assets acquisition
- Special Intervention Fund for the Sector

Also the NCDMB Marine Vessel Scheme focus on increasing retention of industry spend from marine vessel utilization through the following interventions:

- Promote and sustain growth in indigenous ownership of Marine Vessels
- Enforce utilization of Nigerian owned Marine Vessels
- Increase capacity of local ship yards to build service & maintain Marine Vessels of various sizes

• Develop and maintain healthy pipeline of skilled marine operators and seafarers
  Investments in the form of funding for asset acquisition, technology, leasing, R & D and
  human capacity building are some opportunities to be explored by both local and
  international investors.

Existing Opportunities

Ship Financing: Shipping is capital intensive as critical maritime assets are usually long-term assets that have longer life span and gestation period.

Government intervention in the sector is therefore essential to source funding required to unlock the acquisition of these maritime assets.

Furthermore, Prospective investors and buyers should seek innovative financing models and new sources of funding should be explored away from existing traditional models.

Effectiveness of seeking and securing financing will, however, only be achieved with adequate evaluation and provisioning for risks, appropriate leverage levels and use of financing structures most suitable to a maritime asset at hand.

There has to be funding structure that suits the maritime sector because it is capital intensive. The capital market remain critical for the enhancement as well as the promotion of shipping business growth and creation of corporate value.

They are viable financial alternatives. Ship Building and Ship Repairs: The maritime industry in Nigeria holds a lot of promise for economic development. One of which is the gradual migration of Nigeria’s oil and gas exploration towards deep offshore, off the cost and in the coastal waters. This would increase the demand for more offshore support vessels, FPSOs, tankers and platforms. Huge investments are required in developing this aspect of the industry which is critical for trade facilitation.

Investments in the form of funding, technology and human capacity building are some opportunities to be explored by both local and international investors.

A capacity audit of ship building and ship repairs yards in Nigeria has been commissioned as this subsector remains under developed and has potentials of reducing capital flight if vessels are dry-docked in country.

There are huge investment opportunities in building of vessels to meet national and cabotage requirements.

Dry Docking remains a critical area of investment with over 3,500 vessels operating in Nigerian waters and largely been dry-docked outside the shores.

Nigeria has quite a few ship yards in operation but the capacity remains an all-time low.

Marine Insurance: The insurance sector represents the backbone of Nigeria’s risk management system.

Therefore, the role of insurance in the growth and development of the economy cannot be over emphasized.

Insurance has the ability to mitigate the impact of risk and positively correlates with growth as investors and entrepreneurs cover their exposures and inculcate more risk abilities.

An overview of the insurance industry show that motor, general accident and marine insurance contributes positively to the development of the insurance market in Nigeria by their positive coefficients.

Hence marine insurance will continue to exert significant influence on the overall insurance business in Nigeria.

For marine insurance to thrive, underwriters must adopt a realistic approach to the enormous build-up of exposures in the maritime trade.

Nigeria’s marine subsector is one of the most under developed compared to peers and a number of critical factors that have the potential to drive growth in the area such as technological disruption, mergers and acquisition, recapitalization to underwrite big transactions in the industry have been identified as game changers for investors.

Ship owners are called upon to also look into establishing a Protection and Indemnity Club (P&I). For intending investors, huge opportunities abound in the subsector.

Research and Development: The Maritime Industry has not really made a leap change in the use of Technology.

It is still very much human driven. A number of innovation and new technology approaches are taking place globally and even locally in the oil and gas sector. Investment opportunities exist in setting up training and research centres as these will scale up activities in the maritime sector. Maritime Law and Law of the Sea Experts: The law relating to activities and sea is based primarily on Maritime Law and the Law of the Sea. Maritime law is the law of things, activities and events related with the sea.

Specifically, it deals with matters concerning sea going personnel, ships and other seagoing vessels, charter contracts and ocean transport, ship ownership and sales, maritime safety incidents at sea and marine insurance.

The law of the sea on the other hand is the law of maritime space, it defines its zones as well as the rights and obligations of States in these zones, especially in regard to environmental protection and law and order at sea.

These maritime law experts are there to inform and advice, act on behalf of clients, draft legal documents where necessary.
Manpower & Human Capacity Development: The availability of manpower is crucial to development of Nigeria’s maritime and shipping sector. Large opportunities exist in establishment, upgrading of facilities and management of maritime institutions.

Nigeria as a country is making heavy investments in human capacity development in the maritime industry which implies to an increase in local participation in shipping especially shipping operations. There are ongoing discussions and plans driven by government for Nigeria to re-float a national shipping fleet. The implication of this development upon its crystallization will see Nigerian flagged vessels trading with other countries of the world.

As expected, this would come with the benefit of employment generation, seetime for cadets and competitive cost of doing business. We need to train our young generation to develop cross disciplinary skills required in today’s world by providing professional development course focussing on advanced maritime technologies, cyber security, maritime and port management, supply chain management etc. West Africa’s offshore oil and gas deposits remain under explored and exploited. Nigeria is playing no significant role in seabed mining and exploration.

There is need for a lot of investment in training and development of maritime professionals.

Haulage and Storage Services (Warehousing): As an industry, we must adapt to changes and develop in sync with shifts in the broader trade and logistics ecosystem.

Ports are now much more than transit points. They provide added value for which there is a real demand, such as the processing of products, financial breaks in free trade zones, specialized packing methods etc. Supply chain logistics (transport of raw materials usually in bulk) accounts for two thirds of shipping traffic, while distributing logistics (manufactured products usually transported in containers) account for the third. The Haulage business provides a lot of opportunities. Also establishing warehouse or distribution houses outside the Ports would help reduce business cost. Marine Renewable Energy, Storage and Services: The Marine Renewable Energy (wind, current, tidal, wave and ocean thermal energy) is the world’s second largest maritime zone. Africa is lagging behind in marine renewable energy technology.

The development of marine renewable energies requires knowledge and know-hows that are specific to our marine environment. Leasing: The robust activities in the sector present enormous opportunities for investors to lease on short- or long-term bases. For instance, the deregulation and liberalisation of the port sector has given additional impetus for private initiatives in terminal operation. Classification Societies: Classification societies play predominant roles in maritime transport by ensuring that ships are built and operated according to satisfactory safety standards.

Marine Support Services: Economic dynamics and global changes account for ongoing transformation and reforms in ports worldwide. Businesses are evolving rapidly embracing technology and innovation.

The pace and scope of change is impressive and opportunities abound for investors. Ship Broking Firms: Acting as intermediary between the supply and demand sides of ship chartering, ship building & sales and dismantling markets. Ship broking firms will further strengthen activities under the cabotage regime. Port Development and Modernization: Construction of new
green filed ports, dedicated coastal berths and development of new terminals and jetties will be required to ensure smooth and efficient shipping operations.

Development of Deep Seaports: In response to the demands of modern day shipping, Nigeria embarked on the development of deep-sea ports. This is a Public Private Partnership initiative between the federal government and private investors. Multiple opportunities for the development of deep-sea ports are available considering Nigeria’s coastline stretching over 853kms. Some deep-sea projects which are already at different stages of implementation include the Ibom deep sea port in Akwa Ibom State, the Lekki deep sea port and Badagry deep sea port in Lagos State.

Inland Container Depots and Multimodal Transport: Inland Container Depots are inevitable as a result of the vastness and diversity of the country’s landscape and the resulting distance between some major commercial centres and the coastline, there is need to bridge the service gap occasioned by the lack of access to seaport services. Hinterland connectivity & Multimodal Logistics: Modernization of rail corridors and connection of narrow gauges at ports will speed up evacuation of goods and reduce congestion.

Investments through Public Private Partnership is encouraged. Blockchain Technology: Potentials exist in the use of blockchain technology, in cargo tracking; visibility in the supply chain; recording vessel information including global risks and threats; integrating smart contracts; maritime policies and digitizing, as automating the documentation and reserves save costs and time for the release and movement of the cargo.